

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings of claims in the application:

**Listing of Claims:**

1. (Currently amended) A method for diagnosing ~~a mental disorder in a~~  
~~subject, wherein said mental disorder is selected from the group consisting of bipolar disorder in~~  
a subject and major depressive disorder, the method comprising the steps of:

(i) isolating a subject's brain tissue, wherein said tissue is selected from the  
subject's dorsal lateral prefrontal cortex;

(ii) contacting the subject's brain tissue with a nucleic acid probe complementary  
to TBR1 messenger RNA;

(iii) detecting the level of said nucleic acid probe that selectively associates with  
said TBR1 messenger RNA; and

(iv) comparing the detected level of associated probe with a control, whereby if  
the detected level is significantly greater than the control, an increased likelihood that the subject  
has bipolar disorder ~~or major depressive disorder~~ is determined; and whereby, if the detected  
level is not significantly greater than the control, an increase in said likelihood is not determined  
by the method.

2-50. (Canceled)

51. (Previously presented) The method of claim 1, wherein the subject is  
deceased.

52-53. (Canceled)

54. (Previously presented) A method for diagnosing bipolar disorder in a subject, the method comprising the steps of:

- (i) isolating a subject's brain tissue, wherein said tissue is selected from the subject's dorsal lateral prefrontal cortex;
- (ii) contacting the subject's brain tissue with a nucleic acid probe complementary to CAMKII- $\alpha$  messenger RNA;
- (iii) detecting the level of said nucleic acid probe that selectively associates with said CAMKII- $\alpha$  messenger RNA; and
- (iv) comparing the detected level of probe with a control, whereby if the detected level is significantly greater than the control, an increased likelihood that the subject has bipolar disorder is determined; and whereby, if the detected level is not significantly greater than the control, an increase in said likelihood is not determined by the method.

55. (Previously presented) The method of claim 54, wherein the subject is deceased.

56. (New) The method of claim 1 or 54, wherein an increased likelihood of bipolar disorder is determined, and further comprising treating said subject for bipolar disorder following said determination.